

Phrase Structure and the Teaching of English¹

Christopher J. Hall, Universidad de las Américas-Puebla²

Introduction

Teachers of English to speakers of other languages are consistently challenged by students, syllabuses and texts with respect to their knowledge of English Syntax (or, as it is more traditionally called, grammar). Syntax courses taken during teacher training often provoke symptoms ranging from anxiety to horror. Nevertheless, I would argue that a teacher's conscious awareness of the syntax of the language she or he is teaching, and an ability to appreciate the nature of student errors and guide the student in their avoidance, is a crucial component in the repertoire of skills necessary for effective language teaching. In an article about the work of the linguist Noam Chomsky published in this Journal, however, I wrote that:

What language teachers should learn from Chomsky's work is not the details of his theory of syntax, but rather the general framework he has provided for understanding the nature of language. Although familiarity with Chomsky's syntactic theory will help English teachers to follow this exciting debate [about the role of Universal Grammar in second language learning], it will not greatly enhance our effectiveness as teachers (1993: 40).

It may appear that I am committing a *volte face* here by advocating teacher knowledge of English syntax, however, emphatically, what I am **not** advocating here is familiarity with the **details** of Chomsky's theory of syntax, which is highly technical, not designed specifically for English, and is, as I argued in that paper, not of great utility for teachers of English.

The focus of my exposition here is phrase structure (often diagrammed as syntactic 'trees'), which is a handy and easily accessible descriptive technique for aspects of English syntax. Phrase structure is no longer seen by linguists as the core of syntax,

¹ I am grateful to my English Syntax students in the Master's Program at the UDLAP for their feedback on the relevance of phrase structure in their classrooms and to Patrick Smith for comments on the paper and for getting me into it in the first place. A preliminary version of this paper was presented at the 20th National MEXTESOL Convention held in Puerto Vallarta in October 1993.

² The author can be reached at the Departamento de Lenguas, Universidad de las Américas-Puebla, APDO 100, Santa Catarina Mártir, Cholula, Puebla 72820. TEL: (22) 29-20-53, FAX: (22) 29-20-96.

and syntax is still just one element of grammar (which includes phonology, morphology and other components). In its turn, grammar is only part of what is needed to speak a second language appropriately. This is Hymes' notion of grammatical competence as part of communicative competence (e.g., Hymes 1984). Current emphasis in language teaching on the communicative aspects of competence has led to the false impression that grammar is secondary or even unnecessary. Nevertheless, communicative competence makes no sense without grammar, and grammar makes no sense without phrase structure. Phrase structure is, then, something that L2 speakers know when they know a second language. Consequently, it should not be ignored by language teachers.

The paper is structured as follows. In the first part, I identify some basic aspects of phrase structure in English, and I highlight corresponding error types by showing some major differences between English and Spanish phrase structure. In the second part of the paper I discuss the importance of phrase structure knowledge for language teachers, emphasising its role not as a vehicle for explicit teaching, but as a resource which teachers can draw on in response to student inquiries and errors, as well as to satisfy their own healthy curiosity about what they are teaching.

Some basic aspects of English phrase structure

Word order

Syntax is the study of how we combine words into phrases and sentences.³ Human languages have very complex rules for combining words, which entail a whole lot more than merely stringing them together like beads on a string. If, for example, I see a pig carrying a crown, and I want to describe this event in English, I cannot just string together the words *pig*, *crown* and *carry* in any order: Apart from knowing that I have to add tense to the verb and articles to the nouns, I have to know that *pig* comes before *carry* and that *crown* comes after it. This does not follow automatically from the meaning of words or the structure of the event: in a language like Japanese, for example, both nouns would come before the verb, and in Latin the words could come in any order. Even in Spanish, the order can vary considerably. Let us consider the examples in (1)-(4):

³ Good, but dated, introductions to generative syntax are Lyons (1970) and Smith & Wilson (1979). More up-to-date introductions can be found in Cook (1988) and Akmajian et al. (1990). The best summary of modern syntax is Radford (1988): it is clearly written, fun to read and intellectually challenging.

1. a. Porcus coronam portavit. (Latin)
 b. Coronam porcus portavit.
 c. Portavit porcus coronam.
 d. Portavit coronam porcus.
 e. Porcus portavit coronam.
 f. Coronam portavit porcus.
2. a. La cochina llevó la corona. (Spanish)
 b. Llevó la cochina la corona.
 c. Llevó la corona la cochina.
 d. La corona llevó la cochina.
 e. La corona la cochina llevó.
 f. La cochina la corona llevó.
3. The pig carried the crown. (English)
4. Buta-ga okan-wo motteitta. (Japanese)

The languages of the world may be grouped into three basic types of indicative-declarative word order: (a) rigid word order language, like English and Japanese, which permit no (or almost no) variation; (b) pragmatic word order languages, which have a basic order which may be changed for pragmatic effects, like Spanish; and (c) free word order languages, like Latin, which allow subject, verb and object in any order.

In some languages of the Indo-European family (which includes Latin, Spanish and English), there has been a move from free to rigid word order. This shift accompanied the collapse of the inflectional system of suffixes which give information about grammatical relations like subject or verb or direct object of verb. Note, for example, the following sentences in old English from around a thousand years ago (where V = verb, S = subject and O = object):

5. a. Thes guma seah seo rod. (Old English)
 'This man saw the cross.' (S-V-O)
 b. Seo rod seah thes guma.
 'The cross saw this man.' (O-V-S)
 c. Thes guma seo rod seah.
 'This man the cross saw.' (S-O-V)

In these examples, the nouns carry grammatical suffixes which indicate whether they are functioning as subject or object (e. g., the object form of 'man' is *guman* and the subject form of 'cross' is *rode*). These endings have been lost in English from all but the pronouns, and such freedom in word order has similarly disappeared. Spanish, on the other hand, although having also lost most of its inflectional system on nouns, has retained some word order freedom. Hence, for example, common learner errors such as the following (where V = verb, C = complement, S = subject):

6. a. * I think [is interesting its architecture]. (V-C-S)
- b. * In the summer [arrived a lot of people]. (V-S)

In 6a, the focus is placed on the adjective *interesting*, and so the subject *its architecture* is shifted to the end of the sentence, just as in the Spanish equivalent *Pienso que es interesante su arquitectura*. In 6b, the adjunct phrase *in the summer* has prominence, again forcing the subject (*a lot of people*) into postverbal position. The Spanish equivalent would be *En el verano llegó mucha gente*. English, of course, cannot topicalise elements of a sentence just by changing linear order in this way.

Hierarchical structure

I said in the previous section that sentences are not just strung together randomly like beads on a string. Sentences have hierarchical structure, which means that they are grouped into constituents between the word and sentence levels. Any complex entity, be it an institution, a machine, or a living organism, has hierarchical structure. So it is with sentences, which are composed of two major constituents: a nominal subject and a verbal predicate. We can describe this structure in a phrase structure 'rule' of the form $S \rightarrow NP VP$, which says that a sentence (S) is composed of a noun phrase (NP) and a verb phrase (VP), which means we can draw the following branches from S:



Noun phrases, in turn, can be composed of an article (a 'determiner', D) and a noun (as in *the pig*) and this can be described by the rule $NP \rightarrow D N$. Similarly, the verb in a verb phrase can take a direct object as a complement which itself is a NP, captured in a rule as $VP \rightarrow V NP$. This set of rules gives us the structure of many thousands of sentences, given the wide vocabulary of English, and given a syntax like the one in (7), we can describe millions of sentences (though still only a subset of all the possible sentences):

- 7. A partial phrase structure syntax of English
 - S ---> NP VP
 - NP ---> (D) (AP) N (PP)
 - VP --> (AUX) V (NP) (PP)
 - AP --> (D) A (PP)
 - PP --> P (NP)

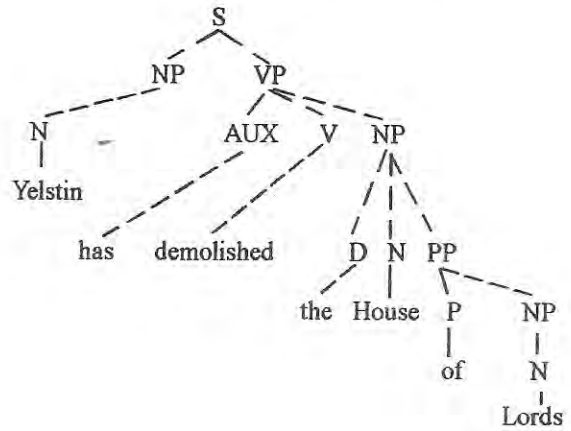
Note the use of parentheses in (7) to indicate optional nodes (i. e., branches we can choose to draw or not to draw, as the case may be). Using the sample vocabulary list in (8), we can now describe sentences as distinct as the ones listed in (9) below.

- (8) N: vodka quantity spider taco house Yeltsin lord tree
- V: choke love demolish eat walk fall drink
- A: large emotional white happy syntactic
- P: of with in off on
- D: the a(n) very
- AUX: have is

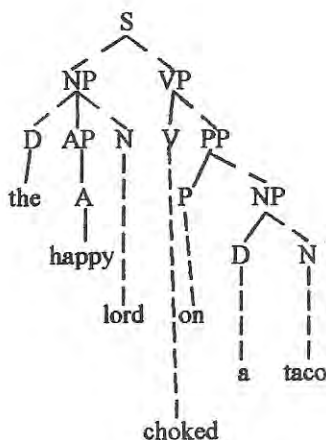
- (9) a. Yeltsin has demolished the House of Lords.
- b. The happy lord choked on a taco.
- c. The spider is walking in.
- d. The White House fell on a spider.
- e. A very emotional Yeltsin drank a very large quantity of white vodka.
- f. Lords love syntactic trees.

The trees corresponding to sentences (9a) and (9b) are given below:

(9a')



(9b')



There are many hundreds more (not all of which make such exquisite sense as these!).

The easiest way to find your way around a syntactic tree is to treat it as a family tree. Syntacticians, being in the vanguard of non-sexism, label the leaves of the tree (its nodes) with female kinship terms only; so, the top node in a branching structure is called the mother node, and immediately lower nodes are daughters. To each other they are sisters. The notions of subject and object of the verb can, then, be defined in terms of their hierarchical positions in the tree: the subject of a sentence is the NP which is daughter to S (has S as its mother node) and has VP as sister. The object NP is the one which has V as a sister and is daughter to VP. In English, a word must occur in the subject position, even if it has no meaning or is redundant in context (for example, *It is raining* or *There are seven words in this sentence* or *They are finished*). This requirement again is relatively new in the history of the language; English used to allow sentences without a pronoun in subject position, because, like Spanish, the verb ending gave the number of the subject. Spanish, with its relatively rich inflectional system, can also choose not to fill the subject position, hence errors such as the following:

- (10) a. *In Mexico ___ are more young people.
 b. * ___ Is very contaminate.

The point for Spanish is not that it has an alternative rule $S \rightarrow VP$, leaving out the subject NP altogether, but rather that the NP position is **unfilled**.

Head-Modifier ordering

As we have seen, the rules not only specify the hierarchical structure of sentences, but also their linear order. One can stack up (i. e., order) the constituents of a hierarchical structure like a music centre in different ways (for example with the amp on top, then the cassette player, the radio and last the CD player), without changing the function of the entire structure. Many languages, however, as we have seen, tend to use linear order to change meaning (or at least the emphasis) of the sentence. In fact, languages tend to do more than this; they show a great preference for lining up the elements of phrases in the same way. For example, Japanese is a head-final language, which means that in Japanese all the modifiers of the head categories N, V, A and P (the obligatory elements of the corresponding phrases NP, VP, AP, PP) precede the head: direct objects come before verbs; objects of prepositions come first (hence they are called **postpositions** in Japanese); relative clauses and PPs come before the noun; and comparatives come before the adjective. In Spanish and English, the opposite is the case, as we see in the following examples:

(11)	Head	Modifier
a.	carry	the crown
	sing	in the rain
b.	king	for a day
	one	that I love
c.	in	trouble
	out	for a duck
d.	happy	to see you
	harder	than ever

The one exception for English in this head-first ordering is the AP used to modify the noun: It comes before the noun, not after. Hence the profusion of errors of the type listed in (12), committed by Spanish-speaking learners of English:

- (12) a. *It's a place very interesting.
 b. *It has colonial houses very bigs.
 c. *Salzberg is a rich country more civilized.

These students wrongly assume that English obeys the head-first ordering principle as well as their native language does.

Phrase Structure and the Teacher

The error types I have pointed out in this paper will hardly come as news to English teachers: Spanish-speaking learners of English have been shifting subjects, dropping pronouns and misplacing adjectives since Modern English came into being. What is different about seeing these errors from the perspective provided by a theory of phrase structure? My answer comes in the form of a plea. Modern linguistic and psycholinguistic theories can now provide accounts of the way the mind goes about the language learning process and what the end result looks like. This means that teachers, as professional facilitators of learning, need to respond to these theories through reflection on their profession and through informed development of teaching methodologies. Approaches and methodologies have come and gone in this profession with remarkable swiftness: rarely have they been developed on the basis of linguistic theories of language. Having a basic understanding of current theories about the human language faculty, of which phrase structure theory is a part, seems crucial if language teachers are to really come to terms with their subject and how it differs from other academic subjects (see Hall 1993 for more explicit discussion on this theme).

Specifically, a theory of phrase structure for human languages provides the teacher with information about why certain errors happen and why many other potential ones do not.⁴ A knowledge of comparative grammar, in this case of how much Spanish and English overlap in their deployment of phrase structure and how much they differ, allows teachers to recognise areas of syntax requiring conscious attention in the classroom. Concretely, we have seen that Spanish and English share a basic word order (SVO) and head-ordering (head-first), but differ in that English has defective head-ordering, placing adjective phrases before instead of after the noun. These areas of divergence between the L1 and L2 are precisely the aspects of English phrase structure which should be explicitly taught to learners. This should not necessarily be achieved through blackboard tree-drawing. However, armed with the appropriate theory, teachers can better determine the most appropriate methodology. Syllabus and textbook designers, as well as teachers "at the chalk face", need to be able to spot exceptions to shared rules and areas where rules differ, if they are to predict areas of difficulty for learners. In order to do this, the basic rules need to be known.

⁴ See Brown (1987: Ch. 8) for a general discussion of contrastive analysis, a linguistic basis for teaching which, in the moderate version discussed by Brown, roughly corresponds to what I am advocating here.

The theory of phrase structure I have sketched here is only a drop in the ocean of linguistic knowledge; knowledge which both linguists and language learners struggle to understand, even if in very different ways and with different goals in mind. Phrase structure, syntax and linguistics in general play a vital role in teacher-training, and the theories that linguists build, although often technical and seemingly unrelated to the concerns of teachers, should, I believe, be viewed as essential groundwork for the continuing development of a teacher's broad repertoire of skills.

REFERENCES

- Akmajian, A., R. A. Demers, A. K. Farmer and R. M. Harnish. 1990. *Linguistics: An Introduction to Language and Communication*. Cambridge, MA. MIT Press.
- Brown, H. D. 1987. *Principles of Language Learning and Teaching*. Englewood Cliffs, N. J. Prentice Hall.
- Cook, V. J. 1988. *Chomsky's Universal Grammar: An Introduction*. Oxford: Basil Blackwell.
- Hall, C. J. 1993. "Who's afraid of Noam Chomsky? A tutorial review for teachers of English." *MEXTESOL Journal*. 16,4. 29-42.
- Hymes, D. H. 1984. "On communicative competence" in J. B. Pride and J. Holmes (Eds.) *Sociolinguistics: Selected readings*. Harmondsworth. Penguin.
- Lyons, J. 1970. "Generative syntax" in J. Lyons (Ed.) *New Horizons in Linguistics*. Harmondsworth. Penguin. 115-139.
- Radford, A. 1988. *Transformational Grammar: A First Course*. Cambridge. Cambridge University Press.
- Smith, N. and D. Wilson. 1979. *Modern Linguistics: The Results of Chomsky's Revolution*. Harmondsworth. Penguin.